

1 Claim 8 Drawing Sheets

**PREAMBLE- Name of Inventor/ Title / address**

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**TYPE OF PATENT: Utility**

[A] NAME OF INVENTION - VERTICAL LIFT ENVELOPE - (VLE - Name of the invention to be related throughout the patent application)

## REFERENCES

[B] Cross - reference to related applications

Other similar patents/references:

US Patent

06270038	8/07/01	Cycon et al.	Toroidal VTOL (Sikorsky)
06270036	8/07/01	Lowe, Jr.	Blown Air Lift Airfoil Aircraft
06179247	6/30/01	Milde, Jr	Personal Air Transport
06073881	6/13/00	Chen	Aerodynamic Lift Apparatus
06086016	7/11/00	Meek	Gyro Stabilized Triple Rotor Craft
05895011	4/20 99	Gubin	Turbine Airfoil Lifting Device
04824048	4/25/89	Kyusik	Induction Flying Saucer
04773618		Ow	Jet exhaust over airfoils in fan
04778128		Wright et al	Rotating airfoil for stabilization
04050652		De Toia	counter rotating discs for stabilization
04461436		Messina	Flying saucer type aircraft
04387867		Jordon	Same
04312483		Boston	Same

[C] Federally sponsored R & D    None

## [K] DRAWINGS

Fig 1	Outer Outline	Page 16
Fig 2	Perspective with Sectional View	Page 17
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Fig 4	Structural Assembly	Page 19
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Fig 8	Intake Ring Closure Detail	Page 23

- 01 - Air Intake and Exhaust
- 02 - Air/Gas Direction
- 03 - Duct
- 04 - Counter rotating plurality of propellers
- 05 - Directional vanes
- 06 - Motor propulsion assemblies
- 07 - Outer skin of vehicle also functioning as a compressed air guide
- 08 - Inner wing or wings
- 09 - Inner structure and storage areas (fuselage)
- 10 - Structural support members
- 11 - Lower airfoil
- 12 - Nozzles - 3 each - Yaw and Pitch control
- 13 - Turbine air intake
- 14 - Turbine - Horizontal flight
- 15 - Compressed gas exhaust tubing
- 16 - Exhaust nozzles - 2 each
- 17 - Directional vanes - 2 each
- 18 - Cone - lower
- 19 - Cone - upper
- 20 - Horizontal control stabilizers
- 21 - Electrical Solenoids or stepper motors
- 22 - Housings for solenoid or stepper motor
- 23 - Plunger mounted to Sealing Ring
- 24 - Seals